

- 1) Management of the patient with arrhythmias
  - a) Assessment
    - i) Symptomatic
    - ii) Hypotensive
    - iii) Hypoperfusion
  - b) Treatment
    - i) Mechanical interventions
      - (1) Vagal maneuvers - if the heart rate is too fast
      - (2) Stimulation - if heart rate is too slow
      - (3) Precordial thump
      - (4) Cough
    - ii) Pharmacological interventions (for example)
      - (1) Aspirin
      - (2) Atropine
      - (3) Adenosine
      - (4) Epinephrine
      - (5) Furosemide
      - (6) Lidocaine
      - (7) Morphine
      - (8) Nitroglycerin
      - (9) Oxygen
    - iii) Electrical
      - (1) Defibrillation
      - (2) Synchronized Cardioversion
      - (3) Transcutaneous pacing
        - (a) Implanted pacemaker functions
          - (i) Characteristics
          - (ii) Pacemaker artifact
          - (iii) ECG tracing of capture
          - (iv) Failure to sense
            1. ECG indications
            2. Clinical significance
        - (v) Failure to capture
          1. ECG indications
          2. Clinical significance
        - (vi) Failure to pace
          1. ECG indications
          2. Clinical significance
    - iv) Transport considerations
    - v) Psychological support/ communications strategies
      - (1) Explanation for patient, family, significant others
      - (2) Communication and transfer of data to the physician

AND:

- c) Ventricular arrhythmias
  - i) Ectopics (PVCs)
    - (1) Management - ABCs, oxygen (as in VIII. A)
    - (2) Consider lidocaine
    - (3) Transport and support (as in VIII.A.8.and 9)
  - ii) Ventricular tachycardia
    - (1) Stable, LOC, blood pressure not impaired
      - (a) Management- ABCs, oxygen, (as in VIII. A)
      - (b) Consider lidocaine
      - (c) Consider adenosine
      - (d) Transport and support (as in A.VIII.A. 8. and 9)

- (2) Unstable
      - (a) LOC altered, diminished, or unresponsive
      - (b) Chest pain/ pressure
      - (c) Consider sedation
      - (d) Consider defibrillation / synchronized cardioversion
      - (e) Transport and support (as in A.VIII.A. 8. and 9)
    - (3) Pulseless
      - (a) Defibrillation as soon as possible
      - (b) Transport and support (as in A.VIII.A. 8. and 9)
  - iii) Ventricular fibrillation
    - (1) Management
      - (a) Confirm pulselessness
      - (b) Cardiopulmonary resuscitation (CPR) until defibrillation is available
        - (i) Confirm pulses with CPR
        - (ii) High flow oxygen
          - 1. Bag-valve-mask
          - 2. Intubate
      - (c) Defibrillation as soon as possible
        - (i) Energy dosage
          - 1. In accordance with local medical protocol
          - 2. In accordance with type and model of defibrillator
      - (d) Medications (for example)
        - (i) Epinephrine
        - (ii) Lidocaine
      - (e) Transport and support (as in A.VIII.A. 8. and 9)